AAY72630
ID   AAY72630 standard; protein; 317 AA.
XX
AC   AAY72630;
XX
DT   15-JUN-2007 (revised)
DT   02-MAY-2001 (first entry)
XX
DE   Human follistatin-1 protein.
XX
KW   Human; follistatin; cytostatic; vulnerary; arthritis; immunomodulatory;
KW   therapy; liver cirrhosis; Gaucher's disease; vaccine; gene therapy;
KW   reproductive system disorder; cell growth disorder; Digeorge syndrome;
KW   tumour; inflammatory bowel disease; anaemia; autoimmune disorder; AIDS;
KW   Acquired Immune Deficiency Syndrome; SLE; systemic lupus erythematosus;
KW   Wiskott-Aldrich disorder; cardiovascular disorder; cancer; ischaemia;
KW   Kaposi sarcoma; hyperproliferative disorder; fibrotic disorder; wound;
KW   neurodegenerative disorder; congestive heart failure; Crohn's disease;
KW   Alzheimer's disease; Parkinson's disease; pulmonary fibrosis; BOND_PC;
KW   follistatin isoform FST317; follistatin isoform FST317 precursor;
KW   follistatin isoform FST317 precursor [Homo sapiens]; FST; FS;
KW   follistatin precursor; follistatin; follistatin, isoform CRA_a;
KW   follistatin, isoform CRA_a [Homo sapiens]; GO122; GO5515; GO5576; GO7276;
KW   GO7389; GO8585; GO17106; GO30509; GO42475; GO45596; GO46882; GO7275.
XX
OS   Homo sapiens.
XX
PN   WO200105998-A1.
XX
PD   25-JAN-2001.
XX
PF   14-JUL-2000; 2000WO-US019198.
XX
PR   16-JUL-1999;   99US-0144088P.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Duan RD, Ruben SM;
XX
DR   WPI; 2001-103150/11.
DR   PC:NCBI; gi5453652.
DR   PC:SWISSPROT; P19883.
XX
PT   Nucleic acids encoding follistatin-3, useful for the prevention,
PT   diagnosis and treatment of e.g. arthritis, liver cirrhosis and Gaucher's
PT   disease.
XX
PS   Disclosure; Page 232-233; 245pp; English.
XX
CC   The present sequence is human follistatin-1 protein, a member of inhibin-
CC   related proteins. Follistatin-1 protein is 43.2% identical to follistatin
CC   -3 protein and is an important factor in the regulation of follicle
CC   development and spermatogenesis in reproductive systems. It also acts as
CC   an antagonist of activin by preventing the interaction of activin with
CC   its receptor. In a similar manner follistatin-1 also targets TGF-beta
CC   superfamily members. Follistatin-3 sequences are used in the prevention,
CC   diagnosis and treatment of diseases associated with inappropriate
CC   expression of follistatin-3. The follistatin-3 sequences and their
CC   agonists or antagonists are useful in the diagnosis, prevention and
CC   treatment of reproductive system-related disorders; cell growth and
CC   differentiation disorders (tumours, arthritis, inflammatory bowel
CC   disease); immune disorders (Digeorge syndrome, anaemia and Wiskott-
CC   Aldrich disorder); autoimmune disorders (AIDS, Crohn's disease, systemic
CC   lupus erythematosus-SLE); hyperproliferative disorders (purpura,
CC   Gaucher's disease, Sezary syndrome); cardiovascular disorders
CC   (pericarditis, congestive heart failure, ischaemia); cancers (Kaposi
CC   sarcoma, lymphoma); neurodegenerative disorders (Alzheimer's disease,

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CC   Parkinson's disease); to stimulate wound healing and treat other fibrotic
CC   disorders (liver cirrhosis and pulmonary fibrosis) and inhibit
CC   angiogenesis. Follistatin-3 DNA sequence is also useful in chromosome
CC   identification and in gene therapy
CC
CC   Revised record issued on 15-JUN-2007 : Enhanced with precomputed
CC   information from BOND.
XX
SQ   Sequence 317 AA;

  Query Match              100.0%;  Score 1788;  DB 4;  Length 317;
  Best Local Similarity    100.0%;  Pred. No. 1.4e-118;
  Matches  317;  Conservative   0;  Mismatches   0;  Indels   0;  Gaps   0;

Qy          1 MVRARHQPGGLCLLLLLLCQFMEDRSAQAGNCWLRQAKNGRCQVLYKTELSKEECCSTGR 60
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MVRARHQPGGLCLLLLLLCQFMEDRSAQAGNCWLRQAKNGRCQVLYKTELSKEECCSTGR 60

Qy         61 LSTSWTEEDVNDNTLFKWMIFNGGAPNCIPCKETCENVDCGPGKKCRMNKKNKPRCVCAP 120
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 LSTSWTEEDVNDNTLFKWMIFNGGAPNCIPCKETCENVDCGPGKKCRMNKKNKPRCVCAP 120

Qy        121 DCSNITWKGPVCGLDGKTYRNECALLKARCKEQPELEVQYQGRCKKTCRDVFCPGSSTCV 180
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 DCSNITWKGPVCGLDGKTYRNECALLKARCKEQPELEVQYQGRCKKTCRDVFCPGSSTCV 180

Qy        181 VDQTNNAYCVTCNRICPEPASSEQYLCGNDGVTYSSACHLRKATCLLGRSIGLAYEGKCI 240
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 VDQTNNAYCVTCNRICPEPASSEQYLCGNDGVTYSSACHLRKATCLLGRSIGLAYEGKCI 240

Qy        241 KAKSCEDIQCTGGKKCLWDFKVGRGRCSLCDELCPDSKSDEPVCASDNATYASECAMKEA 300
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 KAKSCEDIQCTGGKKCLWDFKVGRGRCSLCDELCPDSKSDEPVCASDNATYASECAMKEA 300

Qy        301 ACSSGVLLEVKHSGSCN 317
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Db        301 ACSSGVLLEVKHSGSCN 317
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